

Serial Number: 09/125,031B

CRF Processing Date: 1/8/2001

Edited by: [Signature]

Verified by: [Signature]

(STIC staff)

ENTERED

#16

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☒ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☒ Inserted mandatory headings, specifically: C2207 - Seqs 2, 5
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

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JAN 17 2001

TECH CENTER 1600/2800

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING DATE: 01/12/2001
 PATENT APPLICATION: US/09/125,031B TIME: 09:23:41

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 Output Set: N:\CRF3\01112001\I125031B.raw

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3 <110> APPLICANT: LONGACRE-ANDRE, SHIRLEY
4   ROTH, CHARLES
5   BARNWELL, JOHN
6   HENDIS, KAMINI
7   NATO, FARIDABANO
9 <120> TITLE OF INVENTION: RECOMBINANT PROTEIN CONTAINING A C-TERMINAL FRAGMENT OF
10  PLASMODIUM MSP-1
12 <130> FILE REFERENCE: 0660-0139-0XPCT
14 <140> CURRENT APPLICATION NUMBER: 09/125,031B
15 <141> CURRENT FILING DATE: 1999-03-10
17 <150> PRIOR APPLICATION NUMBER: PCT/FR97/00290
18 <151> PRIOR FILING DATE: 1997-02-14
20 <150> PRIOR APPLICATION NUMBER: FR96/01822
21 <151> PRIOR FILING DATE: 1996-02-14
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42   1           5           10           15
44 aac tct ggc tgl ttc aga cac ttg gac gag aga gag gag tgt aaa tgt   96
45 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
46   20           25           30
48 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac   144
49 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
50   35           40           45
52 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc   192
53 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
54   50           55           60
56 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt   240
57 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
58   65           70           75           80
60 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa   288
61 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
62   85           90           95
64 taa   291
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 95

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RAW SEQUENCE LISTING DATE: 01/12/2001
 PATENT APPLICATION: US/09/125,031B TIME: 09:23:41

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79 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
80           20           25           30
81 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
82           35           40           45
83 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
84           50           55           60
85 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
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100 tgtgttgaaa atccaaatcc tacttgtaac gaaaaataat gtggatgtga tgcagatgcc 180
101 aaatgtaccg aagaagattc aggtagcaac ggaagaaaa tcacatgtga atgtactaaa 240
102 cctgattctt atccactttt cgatggatatt ttctgcagt          279
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115 <222> LOCATION: (1)..(354)
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120   1           5           10           15
122 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt   96
123 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
124           20           25           30
126 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac  144
127 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
128           35           40           45
130 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc  192
131 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
132           50           55           60

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RAW SEQUENCE LISTING DATE: 01/12/2001
 PATENT APPLICATION: US/09/125,031B TIME: 09:23:41

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136 65 70 75 80
138 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc tcc 288
139 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
140 85 90 95
142 tct aac ttc ttg ggc atc tcg ttc ttg ttg atc ctc atg ttg atc ttg 336
143 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
144 100 105 110
146 tac agc ttc att taa taa 354
147 Tyr Ser Phe Ile
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161 1 5 10 15
162 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Cys Lys Cys
163 20 25 30
164 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
165 35 40 45
166 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
167 50 55 60
168 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
169 65 70 75 80
170 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
171 85 90 95
172 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
173 100 105 110
174 Tyr Ser Phe Ile
175 115
179 <210> SEQ ID NO: 6
180 <211> LENGTH: 342
181 <212> TYPE: DNA
182 <213> ORGANISM: Plasmodium falciparum
184 <400> SEQUENCE: 6
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186 catttagatg aaagagaaga atgtaaatgt ttattaaatt acaaacaga aggtgataaa 120
187 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc 180
188 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa 240
189 cctgattctt atccactttt cgatgttatt ttctgcagtt cctctaactt cttagggaata 300
190 tcattcttat taatactcat gttaatatata tacagtttca tt 342
193 <210> SEQ ID NO: 7
194 <211> LENGTH: 387
195 <212> TYPE: DNA

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RAW SEQUENCE LISTING DATE: 01/12/2001
 PATENT APPLICATION: US/09/125,031B TIME: 09:23:41

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205 1 5 10 15
207 tgt caa tgt gaa aca gaa agt tat aag cag ctt gta gcc aac gtg gac 96
208 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
209 20 25 30
211 gaa ttc aac atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag 144
212 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
213 35 40 45
215 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 192
216 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
217 50 55 60
219 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 240
220 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
221 65 70 75 80
223 ccg acc tgt aac gag aac aac ggg ggc tgt gac gca gac gcc aaa tgc 288
224 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
225 85 90 95
227 acc gag gag gac tcg ggc agc aac ggg aag aaa atc acg tgt gag tgt 336
228 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
229 100 105 110
231 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa 384
232 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
233 115 120 125
235 taa 387
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240 <211> LENGTH: 127
241 <212> TYPE: PRT
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244 <400> SEQUENCE: 8
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246 1 5 10 15
247 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
248 20 25 30
249 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
250 35 40 45
251 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
252 50 55 60
253 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
254 65 70 75 80
255 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
256 85 90 95
257 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
258 100 105 110

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RAW SEQUENCE LISTING DATE: 01/12/2001
 PATENT APPLICATION: US/09/125,031B TIME: 09:23:41

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266 <212> TYPE: DNA
267 <213> ORGANISM: Plasmodium falciparum
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276 1 5 10 15
278 atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag aac tct ggc 96
279 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
280 20 25 30
282 tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt ctg ctg aac 144
283 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
284 35 40 45
286 tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac ccc acc tgt 192
287 Tyr Lys Lys Glu Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
288 50 55 60
290 aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc acc gag gag 240
291 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
292 65 70 75 80
294 gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt acc aaa ccc 288
295 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
296 85 90 95
298 gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa taa 330
299 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
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304 <211> LENGTH: 108
305 <212> TYPE: PRT
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310 1 5 10 15
311 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
312 20 25 30
313 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
314 35 40 45
315 Tyr Lys Lys Glu Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
316 50 55 60
317 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
318 65 70 75 80
319 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
320 85 90 95
321 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser

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 JAN 17 2001
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VERIFICATION SUMMARY DATE: 01/12/2001
PATENT APPLICATION: US/09/125,031B TIME: 09:23:42

Input Set : A:\Pto.amc
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L:300 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:9

1641

RAW SEQUENCE LISTING DATE: 01/08/2001
 PATENT APPLICATION: US/09/125,031B TIME: 15:01:47

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**Does Not Comply
 Corrected Diskette Needed**

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3 <110> APPLICANT: LONGACRE-ANDRE, SHIRLEY
4   ROTH, CHARLES
5   BARNWELL, JOHN
6   MENDIS, KAMINI
7   NATO, PARTDABANO
9 <120> TITLE OF INVENTION: RECOMBINANT PROTEIN CONTAINING A C-TERMINAL FRAGMENT OF
10  PLASMODIUM MSP-1
12 <130> FILE REFERENCE: 0660-0139-0XPCT
14 <140> CURRENT APPLICATION NUMBER: 09/125,031B
15 <141> CURRENT FILING DATE: 1999-03-10
17 <150> PRIOR APPLICATION NUMBER: PCT/FR97/00290
18 <151> PRIOR FILING DATE: 1997-02-14
20 <150> PRIOR APPLICATION NUMBER: FR96/01822
21 <151> PRIOR FILING DATE: 1996-02-14
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30 <213> ORGANISM: Artificial Sequence
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35 <220> FEATURE:
36 <221> NAME/KEY: CDS
37 <222> LOCATION: (1)..(291)
39 <400> SEQUENCE: 1
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41 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
42 1      5      10      15
44 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt   96
45 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
46      20      25      30
48 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac   144
49 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
50      35      40      45
52 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc   192
53 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
54      50      55      60
56 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt   240
57 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
58 65      70      75      80
60 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa   288
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64 taa   291
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 95

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RAW SEQUENCE LISTING DATE: 01/08/2001
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78           20           25           30
79 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
80           35           40           45
81 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
82           50           55           60
83 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
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85 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
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93 <213> ORGANISM: Plasmodium falciparum
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98 tgtgttgaaa atccaaatcc tacttgtaac gaaaaa;aatg gtggatgtga tgcagatgcc 180
99 aaatgtaccg aagaagattc aggtagcaac gaaaagaaaa tcacatgtga atgtactaaa 240
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118   1           5           10           15
120 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 96
121 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
122           20           25           30
124 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 144
125 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
126           35           40           45
128 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc 192
129 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
130           50           55           60

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RAW SEQUENCE LISTING DATE: 01/08/2001
 PATENT APPLICATION: US/09/125,031B TIME: 15:01:47

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136 acc aaa ccc gac tcg tac cgg ctg ttc gac ggc atc ttc tgc agc tcc 288
137 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
138 85 90 95
140 tct aac ttc ttg ggc atc tcg ttc ttg ttg atc ctc atg ttg atc ttg 336
141 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
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145 Tyr Ser Phe Ile
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160 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
161 35 40 45
162 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
163 50 55 60
164 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
165 65 70 75 80
166 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
167 85 90 95
168 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
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170 Tyr Ser Phe Ile
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176 <211> LENGTH: 342
177 <212> TYPE: DNA
178 <213> ORGANISM: Plasmodium falciparum
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183 tgtgttgaaa atccaaatcc tacttgtaac gaaaaataatg gtggatgtga tgcagatgcc 180
184 aaatglaccg aagaagattc aggtagcaac ggaagaaaaa tcacatgtga atgtactaaa 240
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RAW SEQUENCE LISTING DATE: 01/08/2001
 PATENT APPLICATION: US/09/125,031B TIME: 15:01:47

Input Set : A:\660139.app
 Output Set: N:\CRF3\01082001\I125031B.raw

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192 <213> ORGANISM: Plasmodium falciparum
194 <220> FEATURE:
195 <221> NAME/KEY: CDS
196 <222> LOCATTON: (1)..(387)
198 <400> SEQUENCE: 7
199 atg aag gcg cta ctc ttt ttg ttc tct ttc att ttt ttc gtt acc aaa 48
200 Met Lys Ala Leu Leu Phe Leu Phe Ser Phe Ile Phe Phe Val Thr Lys
201 1 5 10 15
203 tgt caa tgt gaa aca gaa agt tat aag cag ctt gta gcc aac gtg gac 96
204 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
205 20 25 30
207 gaa ttc aac atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag 144
208 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
209 35 40 45
211 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 192
212 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
213 50 55 60
215 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 240
216 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
217 65 70 75 80
219 ccg acc tgt aac gag aac aac ggg ggc tgt gac gca gac gcc aaa tgc 288
220 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
221 85 90 95
223 acc gag gag gac tcg ggc agc aac ggg aag aaa atc acy tgt gag tgt 336
224 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
225 100 105 110
227 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa 384
228 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
229 115 120 125
231 taa 387
235 <210> SEQ ID NO: 8
236 <211> LENGTH: 127
237 <212> TYPE: PRT
238 <213> ORGANISM: Plasmodium falciparum
240 <400> SEQUENCE: 8
241 Met Lys Ala Leu Leu Phe Leu Phe Ser Phe Ile Phe Phe Val Thr Lys
242 1 5 10 15
243 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
244 20 25 30
245 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
246 35 40 45
247 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
248 50 55 60
249 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
250 65 70 75 80
251 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
252 85 90 95
253 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
254 100 105 110

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RAW SEQUENCE LISTING DATE: 01/08/2001
 PATENT APPLICATION: US/09/125,031B TIME: 15:01:47

Input Set : A:\660139.app
 Output Set: N:\CRF3\01082001\I125031B.raw

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255 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
256      115      120      125
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261 <211> LENGTH: 330
262 <212> TYPE: DNA
263 <213> ORGANISM: Plasmodium falciparum
265 <220> FEATURE:
266 <221> NAME/KEY: CDS
267 <222> LOCATION: (1)..(330)
269 <400> SEQUENCE: 9
270 gaa aca gaa agt tat aaq cag ctt gta gcc aac gtg gac gaa ttc aac 48
271 Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp Glu Phe Asn
272 1 5 10 15
274 atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag aac tct ggc 96
275 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
276 20 25 30
278 tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt ctg ctg aac 144
279 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
280 35 40 45
282 tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac ccg acc tgt 192
283 Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
284 50 55 60
286 aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc acc gag gag 240
287 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
288 65 70 75 80
290 gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt acc aaa ccc 288
291 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
292 85 90 95
294 gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa taa 330
295 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
W--> 296 100 105 110
299 <210> SEQ ID NO: 10
300 <211> LENGTH: 108
301 <212> TYPE: PRT
302 <213> ORGANISM: Plasmodium falciparum
304 <400> SEQUENCE: 10
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306 1 5 10 15
307 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
308 20 25 30
309 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
310 35 40 45
311 Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
312 50 55 60
313 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
314 65 70 75 80
315 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
316 85 90 95
317 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser

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VERIFICATION SUMMARY

DATE: 01/08/2001

PATENT APPLICATION: US/09/125,031B

TIME: 15:01:48

Input Set : A:\660139.app

Output Set: N:\CRF3\01082001\I125031B.raw

L:72 M:258 W: Mandatory Feature missing, <220> FEATURE:

L:153 M:258 W: Mandatory Feature missing, <220> FEATURE:

L:296 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:9